

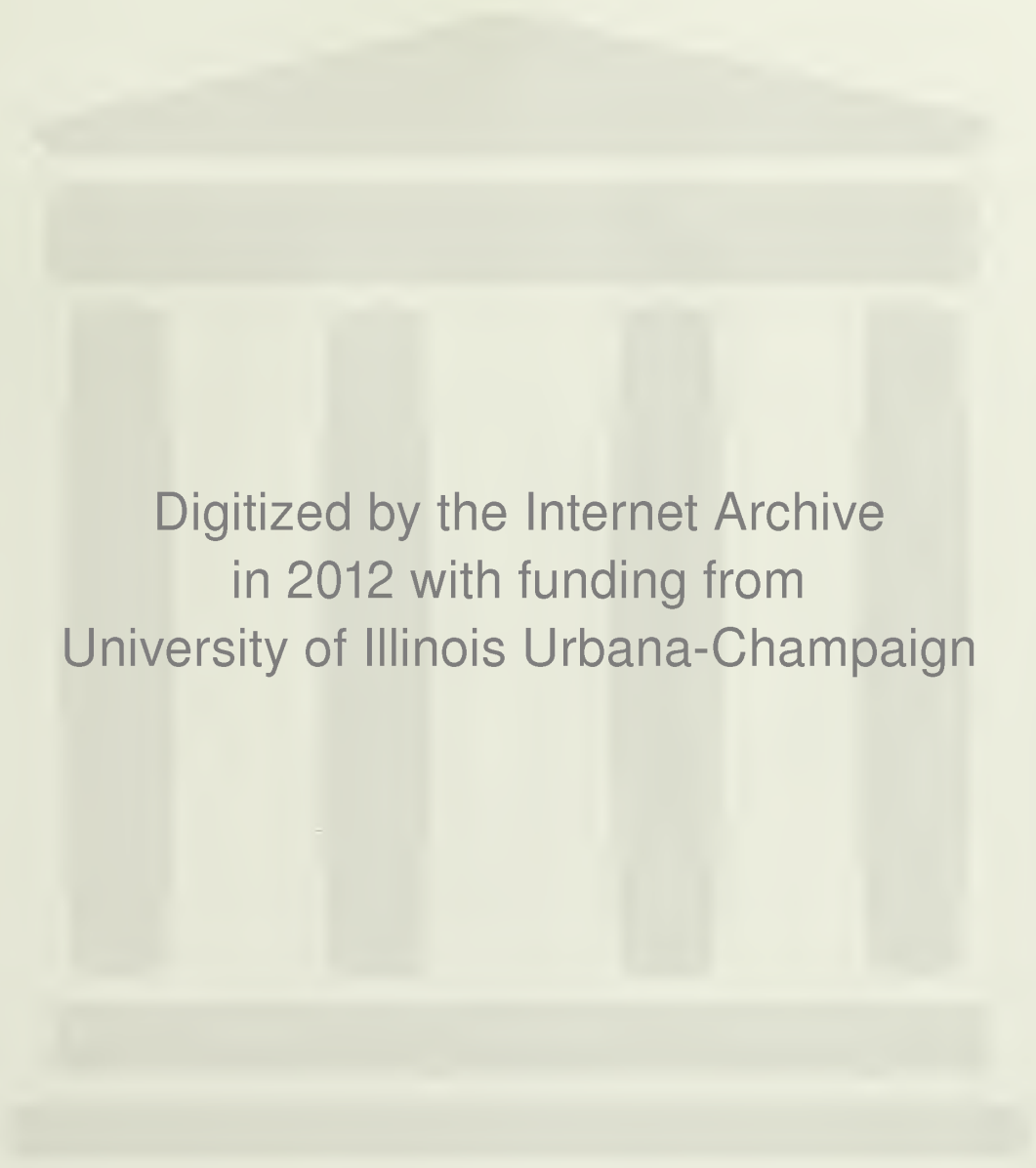




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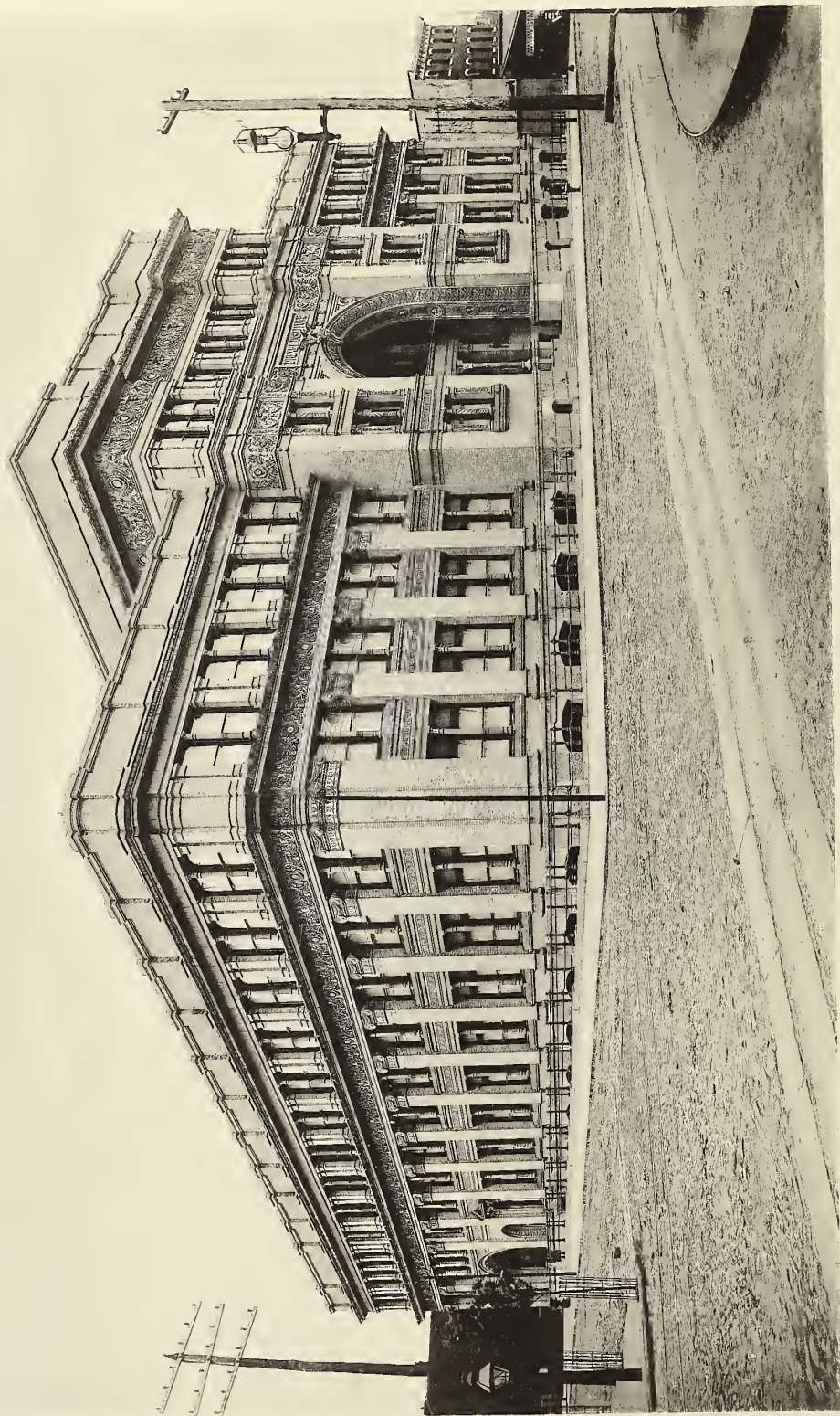








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DREXEL INSTITUTE.





DREXEL INSTITUTE

OF

ART, SCIENCE, AND INDUSTRY.

DEDICATION CEREMONIES.

DECEMBER 17, 1891.

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PHILADELPHIA :  
PRINTED FOR THE DREXEL INSTITUTE.  
1893.

COLLINS PRINTING HOUSE.



# CONTENTS.

	PAGE
BOARD OF TRUSTEES . . . . .	5
BOARD OF MANAGERS . . . . .	6
ADVISORY BOARD OF WOMEN . . . . .	7
DEDICATION CEREMONIES . . . . .	9
INVOCATION BY BISHOP POTTER . . . . .	13
ORATION BY THE HON. CHAUNCEY M. DEPEW, LL.D. . . . .	14
PRESENTATION OF THE TRUST DEEDS—ADDRESS BY THE HON. WAYNE MAC VEAGH, LL.D. . . . .	25
ACCEPTANCE OF THE DEEDS—ADDRESS BY JAMES MAC ALISTER, LL.D., PRESIDENT OF THE INSTITUTE . . . . .	30
DESCRIPTION OF THE BUILDING . . . . .	34

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# DREXEL INSTITUTE

## DEDICATION CEREMONIES.

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THE beautiful and stately edifice, two hundred feet square, erected as the home of the Drexel Institute, is situated on Chestnut Street, at the corner of Thirty-second Street, Philadelphia. It was built "for the purpose of establishing therein a school which will afford to persons of both sexes, on equal terms, opportunities for education and improvement in Art, Science, and Industry;" and it was dedicated to that beneficent purpose on the 17th day of December, 1891. On behalf of Mr. Anthony J. Drexel, the founder of the Institute, there was a formal presentation of the trust deed which conveyed to the Board of Trustees the extensive and costly property, the machinery and appliances, the furniture, with the equipment of the library, museum, and workshops; also the deed investing the Trustees with the munificent Endowment Fund for its maintenance.

The event was marked by impressive religious observance, by fine music, by admirable oratory, and by the attendance of a large concourse of spectators, embracing many of the most eminent and distinguished people in the United States.

It was, indeed, a distinguished assemblage. The visitors began to gather in the library, the galleries, and the great court of the Institute, as early as two o'clock in the afternoon, and they overflowed the spacious auditorium when the hour for the dedicatory ceremonies arrived. The gathering was memorable, not only because of the thousands of persons which it embraced, but because of their broadly representative character and their distinction in every branch of learning, science, and public life.

The Auditorium and Music Hall is on the north side of the building and is entered from the great court by descending a marble stairway. At the east end is a platform, backed by a superb Haskell three-manual organ of the latest construction, an almost unique feature of which is a combination and crescendo pedal by which all or any number of the thirty-two stops can be put on in an instant.

The auditorium was softly lighted from many windows. As daylight slowly faded during the ceremonies, incandescent electric lights, first on the platform and then about the entire hall, gradually grew brighter and strengthened the waning light of the sun. The beautiful hall was entirely without floral adornment. Nothing but the classic simplicity of the interior decoration met the eye. The occasion needed no accessories. The distinguished audience soon filled the seats; chairs were brought in and placed in the aisles, but, notwithstanding, many were compelled to stand in the rear of the hall.

Seated on the platform were nearly two hundred men and women—men whose names are recognized as synonymous with achievement, and women who are noted in educational and charitable circles.

A list of the more than two thousand men and women present at the ceremonies would include many of the best known residents of Philadelphia, New York, Brooklyn, Baltimore, and Washington. Levi P. Morton, Vice-President of the United States, W. H. H. Miller, Attorney-General, John Wanamaker, Postmaster-General, and John W. Noble, Secretary of the Interior, represented the National Government; Governor Pattison, William F. Harrity, Secretary of the Commonwealth, and Thomas J. Stewart, Secretary of Internal Affairs, the Pennsylvania state officials; while Mayor Stuart, Abraham M. Beitler, Director of Public Safety, and James H. Windrim, Director of Public Works, were among the many Philadelphia city officials present. Mr. George W. Childs, Vice-President of the Board of Trustees, assisted by other members of the board of trustees and the board of managers, and by President Mac Alister, received the guests as they entered and escorted them through the building.

The presenee of Bishop Potter, of New York, and Bishop Whitaker, of Philadelphia, of the Protestant Episcopal Church, both of whom took part in the impressive ceremonies; Bishop Howe, of Central Pennsylvania; Bishop Foss, of the Methodist Episeopal Church; Bishop-elect Horstman, of the Roman Catholic Church; and the Rev. William H. Furness, D.D., betokened the religious sympathy for the Institute. The presence of Andrew Carnegie, representing the achievements of the manufacturing world, and Thomas A. Edison, "the sovereign genius of the electric world," indicated the interest of these two great branches of human aetivity, of which the Drexel Institute is to be a part.

Chief Justice Daly, of New York, and Chief Justice Paxson, of Pennsylvania, were two of the eminent members of the legal profession present.

Among the distinguished representatives of education in its various departments were Hon. William T. Harris, LL.D., U. S. Commissioner of Education; Henry Barnard, LL.D., of Hartford, Conn.; D. C. Gilman, LL.D., President of Johns Hopkins University; R. A. Lamberton, LL.D., President of Lehigh University; Seth Low, LL.D., President of Columbia University; William Pepper, LL.D., Provost of the University of Pennsylvania; James E. Rhoads, LL.D., President of Bryn Mawr College; Miss M. Carey Thomas, Ph.D., Dean of Bryn Mawr College; Charles de Garmo, Ph.D., President of Swarthmore College; Henry Morton, LL.D., President of Stevens Institute, Hoboken; Henry Coppeé, LL.D., ex-President of Lehigh University; Professor Nicholas Murray Butler, Ph.D., of Columbia University; Charles Pratt, founder of the Pratt Institute, Brooklyn; Enoch Pratt, founder of the Pratt Library, Baltimore; James W. Mac Kenzie, Ph.D., Head Master of the Lawrenceville School; Captain R. H. Pratt, Superintendent of the Carlisle Indian Training School; Dr. Carey Thomas, President of the Johns Hopkins Hospital, Baltimore.

Besides those above mentioned, there were on the platform, Thomas F. Bayard, ex-Secretary of State; General B. H. Bristow, ex-Secretary of the Treasury; T. L. James, ex-Postmaster-General; General William J. Sewell, ex-United States Senator;

Hon. A. G. Cattell, ex-United States Senator; Hon. Henry H. Bingham, M. C., from Pennsylvania; John Bigelow, LL.D., ex-Minister to France; John Russell Young, ex-Minister to China; Hon. Abram S. Hewitt, ex-Mayor of New York, and Mrs. Hewitt; George B. Roberts, President of the Pennsylvania Railroad Company; A. A. McLeod, President of the Philadelphia and Reading Railroad Company; E. P. Wilbur, President of the Lehigh Valley Railroad Company; Frank Thomson, First Vice-President of the Pennsylvania Railroad Company; General C. T. Christensen, President of the Brooklyn Trust Company; Richard A. McCurdy, President of the New York Mutual Life Insurance Company; Hon. Chauncey M. Depew, LL.D.; Wayne Mac Veagh, LL.D., ex-Attorney-General of the United States; J. Pierpont Morgan, H. McK. Twombly, James J. Goodwin, John Sloane, M. K. Jessup, and Samuel D. Babcock, of New York; Robert H. Sayre, of Bethlehem; Reverdy Johnson, of Baltimore; Robert Purvis, of Philadelphia; General Daniel H. Hastings, of Bellefonte; members of the Philadelphia Board of Public Education; members of Select and Common Councils; Trustees, Managers, and Members of the Advisory Board of Women of the Drexel Institute.

It is sad to be obliged to note that Mr. Anthony J. Drexel, the founder of the Institute, was not present because of the recent death of Mrs. Drexel.

#### THE CEREMONIES.

Dr. James Mac Alister, President of the Institute, presided.

A little after three o'clock the presiding officer stepped to the reading-desk, at the front of the platform, and requested the ushers to close the doors. The auditorium was already crowded. The ceremonies began with Dr. Stainer's March, in D, played on the organ by Mr. James M. Dickinson, the organist of the Institute. Bishop Potter offered the following invocation, concluding with the Lord's Prayer, in which the vast assemblage reverently followed him :—











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## INVOCATION BY BISHOP POTTER.

Almighty God! the fountain of all wisdom and the source of all strength, look down from Heaven, we beseech Thee, and behold and bless Thy servants who are here gathered before Thee. In Thy good providence they have come to own Thy hand and to praise Thy name, as for all Thy benefits so especially for the gift made this day and for the grace that has wrought in Thy servant to the giving of it.

Thine are wisdom, and might, and love; and it is alone of Thy gracious ordering that as by Thy holy inspiration we are enabled to think those things that are good, so by Thy merciful guidance we are enabled to perform the same. And, therefore, we bless Thee for the wisdom that conceived and the beneficence that has accomplished this result; and we pray that Thy heavenly benediction may crown this work with Thy guardianship and favor.

And grant, we beseech Thee, Almighty God, that as all our powers and faculties come from Thee, so we may use them in Thy fear and to Thine honor. Thou hast said in Thy holy word, "He that planted the ear shall He not hear? and He that made the eye shall He not see?" and He that giveth understanding, it is He that shall teach man knowledge. Help us to remember to-day this stewardship of all our members, whether of soul or body, and grant that all those who come here to train them for the service of their fellow-man, dedicate them, first, to Thee. And so, we pray Thee, may it come to pass that all the wisdom and knowledge which may be imparted here, whether it be the cunning of the artificer, the skill of the mechanician, the gracious ministry of domestic service, the art that adorns and beautifies life, or whatever else may be learned here, may pass hence from these walls to make the world better and fairer because of the service which it renders, and so to translate to men everywhere that love of the Infinite Fatherhood that hath wrought in man and in all his best achievements; smoothing, thus, the world's rough ways, making the crooked straight, and lightening the burdens of the weary and heavy-laden.



We commend to Thee all who shall rule or teach here and all who shall come hither to be taught. Kindle in them a lofty purpose and a constant and kindly endeavor. And grant to them, and especially to him who has devised and here completed this noble gift for the good of his fellow-men, Thy heavenly benediction. Take, now, the gift of him who gives and the good purpose of those whose privilege it shall be to use his gift—teachers and pupils, guardians and learners—into Thy gracious keeping, and guide, guard, and sustain them with Thy mighty hand. Bless our country and our rulers. Bless us as a people, in our homes and in our labors. Guard our liberties from secret craft and from open enemies, and make us a people fearing God and working righteousness. All which we ask in the name of Him who has taught us, when we pray, to say :

Our Father, which art in Heaven, hallowed be Thy name ; Thy Kingdom come, Thy will be done on earth as it is in Heaven. Give us this day our daily bread, and forgive us our trespasses as we forgive those who trespass against us. And lead us not into temptation, but deliver us from evil, for Thine is the Kingdom, and the power, and the glory, forever and ever. Amen.

At the conclusion of the invocation, Gounod's triumphant anthem, "Praise Ye the Father," was sung by the choir of St. Stephen's Protestant Episcopal Church.

The dedication address was then delivered by the Hon. Chauncey M. Depew, LL.D., of New York.

#### ORATION BY HON. CHAUNCEY M. DEPEW, LL.D.

Ladies and Gentlemen: "The king is dead, long live the king," has little application to our times. Ancient terms survive, but they have lost their meaning. Words which conveyed certain ideas to former generations express different ones for us. The matchlock and the machine gun, gunpowder and dynamite, represent the destructive forces past and present. The university of the school-men of the middle ages, of Abelard and Duns

Scotus, and the scientific school and technological institute of to-day are object lessons as to the significance of education then and now. We talk glibly of progress and the development which is the distinctive glory of our century, but the pace is so rapid and the results so tremendous that it is difficult to grasp either details or conclusions.

The scientist, the sociologist, the political philosopher, and the theologian each claims for his department special recognition for what it has accomplished and for its advance beyond precedents. The educator is compelled to admit their claims, and also to confess that, owing to difficulties which were not of his creation, it has been impossible for him to keep step with his contemporaries.

All the conservatism of centuries has crystallized about the university. Every radical effort to break up old systems and proceed upon new lines has met the combined hostility of faculty and alumni. They point to results, to the long list of men eminent in the professions and in literature, whom the schools claim to be their product and examples.

Far be it from me to detract in any way from the glory of that splendid and self-sacrificing body of educators who have made illustrious the title of teacher. But the teachers have been so compassed and pinioned by legend, tradition, and environment that they have been unable, except within a recent period, to emancipate the curriculum.

Steam, electricity, and inventions have hardened the conditions of competition and multiplied indefinitely the number of specialties. In the briefest time, and almost without warning, we are brought face to face with the problem that education and prosperity, education and a livelihood, education and morals, education and law, education and liberty, are indissolubly welded together.

In the thirteenth century three volumes easily contained all the learning of that period. Now, from twenty-five to thirty books of the largest size, and edited under the most various and able authorship, do not pretend to embrace in their encyclopædia the knowledge and discovery in the world.

In the middle ages the people could be broadly divided into

two classes, the soldiers and the producers. The labor and skill of the farmer, the merchant, and the artisan were exhausted to support the fighter. Education existed only for ecclesiastics. It was wholly the privilege of the Church. As the nations grew more civilized and their wants increased, the priest became also the lawyer and the doctor. The professions gradually emancipated themselves from the priesthood, but, nevertheless, down almost to our own time, higher education, the course in college or in the university, was reserved for the liberal professions. Even among the most enlightened peoples of Europe education is still a privilege. In America it is a duty.

The first recognition of the imperative demands of our period was when the optional opportunity broke in upon the time-honored course of classics and mathematics. Then came the scientific school, to be looked upon by the academic department as unworthy of its equal recognition and degree. But the pressing necessities of practical life forced many collegians to go through the scientific school as a post-graduate course, and the university to give equal honors to every department of the institution. It is only within our own generation that the perfection of the old education for all the requirements of life has been questioned. The groping after the desired results within the accustomed lines led to the creation of that most abused and misused word "culture."

The Concord School gave it vogue and eminence. With Emerson and his cotemporaries it meant a full mind, trained in college, earnestly and industriously grasping all knowledge, impartially sifting testimony and tradition, with catholic judgment seeking the truth and with a martyr's courage defending it. Culture became popular. It was the badge of a higher order of selected mortals. It excused the universal range of superficiality. It stood for a little information about everything and no accurate knowledge of anything. It became the veneer of the quack and finally the decoration of the dude. But it was not culture, either in its loftier significance or in its degraded use, which the times required. They needed the practical training of youth for the new and sterner realities which science and



invention had created. The old education simply trained the mind. The new trains the mind, the muscles, and the senses. The old education gave the intellect a vast mass of information useful in the library and useless in the shop. The superiority of the college graduate over the boy from the common school in the counting-room, or the mill, was in his disciplined mind and confirmed habits of work. The superiority of the graduate of the technological institute is that he has passed the apprentice period and learned more than the apprentice could ever know.

Our time is full of hope for the optimist and also of despair for the pessimist.

If the Revolutionary fathers and their contemporaries could be brought in contact with the realities of to-day they would feel that the world was upside down. Instead of glorying in the achievements of the present, in the mills, the factories, the furnaces, the superb machinery, the wonderful tools, the complicated mechanism, the hot competitions, and the individual absorbed in the mass which characterize our day, they would wonder how they were to sustain themselves with their equipment and live. Our national pride is promoted by contemplation of the giants of our history in the Senate, in the Pulpit, at the Bar, and in the professor's chair. It is the happy inspiration of youth that the distinguished characters of the past are presented through the lenses of the years in heroic proportions. It would not only be a sacrilege, it would be a calamity, if modern criticism and research stripped Washington of his majesty, Hamilton of his genius, Jefferson of his democracy, Jonathan Edwards of his intellectual superiority, or Daniel Webster of his peerless pre-eminence; but for all practical uses of the labyrinth and revolution through which we are passing, the worthies of the past are as far from us as King Arthur and his Knights of the Round Table, or William Tell with his arrow and his apple.

One of the most eminent of England's scientists has elaborated the alarming proposition that, in the destruction of old methods and the exacting requirements of new conditions, a period might arrive when that nation would die by starvation. The same articles which constituted its business and income would

be manufactured by other countries better and more cheaply, and it would lose its market and revenues. It could not raise its food and would have no money to purchase from abroad. Longer hours and lower wages might postpone, but could not prevent, the catastrophe. The weeping philosopher says that formerly pestilence and disease kept down population and thus saved the world from an excess of mouths to feed and bodies to clothe, but now medical skill and sanitary science have prolonged life. Wars, he argues, then served to prevent increase, but now all moral and political influences labor for peace. "I killed only a million of men, mostly Germans," was Napoleon's ghastly protest against the charge of murder, and yet that frightful number was only a portion of those who fell victims to his wars.

The tendency of our times is for the people to mass in crowded centres where the immigrants add continually to the difficulties and necessities of the community. Competition is the law of our age, and the survival of the fittest its fruit. Not only are individuals and corporations subject to its power, but cities, states, and nations. A line in a tariff bill in one country throws out of employment and reduces to pauperism tens of thousands in another. New machinery or greater skill transfers the market for some product from one place to its rival. The rolling-mills of Alabama may put out the fires in Pittsburg. The cotton mills of Georgia may stop the spindles in Massachusetts. Cheapness and excellence have become the factors of prosperity for nations and for towns.

Our plain duty is not to waste precious hours in vain regrets for the good old times, or wring our hands in helpless horror over the difficulties of the present. The pace of progress may have been faster than our preparations, but experience has demonstrated that, when intelligently met, the new is always better than the old. The man who dies for a principle is a hero, but he who starves, rather than abandon the methods which fed his fathers, is a fool. It is only a generation since a carpenter could plan and build a house, and a single workman make a wagon, or a knife, or a shoe, or a watch, or any part of either. Machinery has so multiplied and subdivided labor and stimulated production that only

a part of any manufactured article comes to the individual, and upon that he must show exceptional skill. The common school has been the foundation upon which we have builded capacity and character, and it has superbly done its work; but now the system requires either to be strengthened or to be supplemented by institutions like the one whose opening we celebrate. The unsolved problem which gives heartaches to parents and anxious thought to teachers and preachers, is the constantly increasing class of young men and women who have the rudiments of education, but are trained neither for any trade nor any business. They will not join the ranks of unskilled labor, and cannot work beside the mechanic or artisan, or expert accountant. They fall into minor positions, already overcrowded, where compensation is small and promotion difficult. They are discouraged as they see those who are better equipped and disciplined rise to competence or independence.

The strength of our liberty has been that it recognizes individuals and not classes. It is still and always must be the pivotal principle of our institutions. It was possible in the earlier period and in sparser settlements to carry the same idea into social and business life. But the inventive genius of the century has radically changed our original conditions. It has proved too strong for capital and trade organizations combined. It has placed them in antagonism, and it has united them for mutual protection. Invention is the Frankenstein of our industrial life. It is the soulless creation of human genius, and relentlessly pursues its purposes. It inflicts untold misery upon the few and confers equal benefits on the many. It has destroyed the apprentice system. It has substituted employer and employé for master and apprentice. Where individuals found work and instruction, armies are attending upon numberless sections of complicated machinery. The skilled workman, who has conscientiously learned his part, is suddenly thrown out by a device which renders his tools obsolete. He suffers hardship and privations until he can acquire almost a new trade, or he drops into the crowded ranks of unskilled labor.

Inventive talent can neither be curbed nor banished. The



necessities of our commercial success demand its encouragement. The limited express train flies along the rails at sixty miles an hour, but the cool and confident photographer by the roadside utilizes the speed of light and imprints locomotive and cars as perfectly upon the sensitive film as if they were standing still at the station. So it is our duty to meet the emergency of the hour by calling into play and exercise the latent forces which God has implanted in man to subdue and bend to his will the powers of earth and air.

The atheist says progress is a destructive agent, but governed by natural laws which Deity can neither modify nor repeal. The Christian believes that progress is the development of opportunity for a higher and better life, and the sons and daughters of the world must be ready to throw aside the old and prepare to welcome and work with the new. Civilization destroys the wild game which is the support of the savage, and he must earn his subsistence from the soil or die. The old warrior wraps his mantle about him and sinks stoically into the grave; the young brave hurls himself with vain but dauntless courage upon the Gatling guns or the bayonets of the soldiers, and his death song is the requiem of the hope and happiness of the tribe. But for those who adapt themselves to the situation are homes and comforts never known before, and a moral and intellectual life which lifts them upon higher planes of usefulness and enjoyment. Similar losses and gains mark every milestone in the upward march of man.

The common school is aroused by the clang of the combat and seeks better to equip its recruits by evening classes. This method is a help, and a great one; but it is still the old education of the head, and falls short of the requirements of the hour. The college joins in the good work of University Extension and brings the benefits of its curriculum to the doors of those who have neither the time nor the money to enter its ancient portals. But whether its teachings are given in venerable halls or in the lecture-room of the village, the benefit of its course of study must be mainly for the minister, the lawyer, the doctor, the journalist, and the business man. For the vast army which must live by labor, and

upon the results of whose labor depends the welfare of the country, no adequate provision has yet been made.

This splendid Institute of Art, Science, and Industry leads the column and points the way. The manual training school solves the problem of labor and industrial development. Here will be given instruction in the principles of science, art, and mechanics, and their application to the mill and the mine, the factory and the furnace, the shop and the engine. Here the student, after he has mastered the principles, can learn the details of his specialty and grasp the intricacies of machinery. In the art department his eyes will be educated and his hands trained by drawing and perspective, by studies in light and shade, by painting in oil and water-color, by theoretical and applied design, decoration, and ornament, and by architectural and mechanical drawing. But physical methods will be supplemented by thorough instruction in the theory and history of art. In the scientific department the secrets of the laboratory will be revealed, chemistry and applied physics will solve the mysteries of nature, and the wonderful works and properties of electricity will become known. As the boy advances from the elementary course, he will receive instruction and become familiar with the workshop and its machinery and tools. He will grow skilful in the handling, manipulation, moulding, and carving of wood and iron. Work on the bench, with the lathe, the drill, the plane, and the screw, and the making of tools, will be common and easy, and the student will practically run the boiler and engine.

The graduates of this school will not be confined within the narrow lines of the apprentice nor bound by the limitations of the specialist. Upon the broad foundations of their training can be securely built superior capacity for the paths in the industrial world which they elect to follow. They will hail the inventor as their friend and follow with keen delight his discoveries and improvements. He may render obsolete and useless the tools to which they are accustomed, or the work which they produce; but their thorough grounding in principles will enable them instantly to understand his device and adapt themselves to the fresh roads they must tread or retire to the rear. Disciplined

intelligence and harmoniously cultivated minds and muscles will give the economy in the use of materials and skill in the handling of tools which will command the markets at home and abroad against the output of mills and factories, where their brethren vainly strive, under old conditions and training, to keep pace with progress and earn living wages in the fierce strife and heat of modern competition.

It is a remarkable illustration of the failure of the schools to divine and meet the changes of the century that the first suggestion of a manual training school came from Victor Della-Vos, Director of the Imperial Technical School of Moscow, in 1868. The Centennial Exhibition in the city of Philadelphia, in 1876, gave to educators in America and Europe an idea of its scope and necessity. The old education had accomplished splendid results during the first hundred years of our Independence. We entered upon our second century by an immediate experiment with the new. After twenty-five years of trial this superb foundation is an enduring monument to its success.

One of the chief glories of the new education is the advantages it gives to women. It recognizes and enforces their equal rights to every intellectual and industrial opportunity which school or college can give to men. It has created for them the Harvard Annex and Barnard, Vassar and Wellesley, Smith and Bryn Mawr. It has opened the doors of this institution that they may enjoy all its privileges.

It was the disgrace and finally the ruin of Greek civilization that wives were uneducated. Virtue and ignorance, vice and culture, were companions among the women of Athens. America has always been distinguished for the consideration and justice accorded to the gentler sex. And yet it is only within the last half of the present century that a university course upon the same plane as the highest of our college curricula has been attainable for girls. By following our example and success, ancient Cambridge, in England, has startled the conservatism of the ages.

The proud ladies who danced the minuet at the inauguration ball of George Washington as first President, never dreamed that



modern development might compel their great-granddaughters to enter the lists of labor to earn a living. Our boasted progress has known neither age nor sex. Tender youth and delicate womanhood have been compelled to meet its requirements. It threw upon woman burdens for which she was unprepared. There were only few things for which she was trained, though she was fitted for many. The overcrowding of a limited market destroyed independence and has compelled women to accept any pittance which avarice might grant. The tragedies of the needle have filled the ocean with tears and the land with sorrows. But from their splendid colleges our girls have graduated equipped for the better positions and pay of the important chairs in the schools of the country, both great and small, and for literature, journalism, and art. From the technological and manual training schools they invade the fields of electrical appliances and mechanical drawing, of photography and phonography, of architecture and decoration. It is still the reproach of our times that women receive less pay than men for the same work equally well done. But chivalry is an emotion, not a habit, and sentiment is left at the shop door in the business world. It is through the power they acquire here, and in institutions like this, that women will be able to fight for and win their rights.

This institution is an object lesson in the proper use of accumulated wealth. The essayist and the orator make it the burning reproach of our period that we sacrifice everything to money-getting and that riches are our god. But the mad desire for accumulation existed before Cræsus, and the passion for hoarding antedates the tragedy of Ananias and Sapphira. Quickly made fortunes are the inevitable incidents of rapid development. The greater the magnitude of the enterprise the more gigantic are the gains of the far-sighted and audacious. The wider the scope of the invention and its general use the more millions flow into the pockets of the inventor. Nearly all our rich men have begun with nothing and made their own fortunes. No sane man desires to destroy the opportunities to get on which are so phenomenally frequent in this country, because in a narrower sense he expects either himself or through his children to enjoy their benefits, and

with broader views he rejoices in the marvellous results in the founding of cities and settlement of states, and in the increase of national power and prosperity which have followed individual enterprise and energy. Under the old civilization no one questioned the rich man's peaceful possession of his property but the king and the brigand. Under the new civilization legislation tends towards the appropriation or the direction of the disposition of estates. The worst enemy or the best friend of wealth is its possessor. He can so selfishly administer it as to rouse the hostility of the public and recruit the ranks of Socialism, or he can so wisely and generously bestow his surplus that the community will approve his work and protect vested interests and rights.

No one remembers nor cares how Peter Cooper made his money ; but neither this generation nor succeeding ones will forget to be grateful to his memory for the wise provisions and endowments he made for the education of the people. Commodore Vanderbilt's control of, and connection with, railways will in time become a tradition which few can recall ; but his name will live forever through the university he founded and which bears his name. Asa Packer's mining and transportation companies are already administered by others than his kin, and his work in their creation and development has passed out of mind and mention ; but the college he established and enriched will ever keep fresh and conspicuous his character and deeds.

The Drexel Institute is not a charity. It neither offends the proud nor encourages the pauper. The dangerous crank is the child and victim of competition. This school will give him a full mind and healthy body. It will so equip him and open avenues for his energies that instead of dynamiting the successful, he will be himself a success. It is a practical and beneficent illustration of the Divine injunction, "Thou shalt love thy neighbor as thyself," which extends the helping hand and tenders warm and sympathetic encouragement to the brother who wants to help himself. It is a noble recognition of the needs of the youth of both sexes by placing before them the weapons and the armor for the battle of life and training them in their uses. It will nurture and instruct a better and broader womanhood, a

braver and more intelligent manhood, and a more patriotic citizenship; and as the years increase and graduates multiply, the Republic will be enriched in its material prosperity and receive new vigor and earnestness in its moral and intellectual life.

At the conclusion of Mr. Depew's address, the choir rendered Mozart's anthem from the Twelfth Mass, "Glorious is Thy Name."

#### PRESENTATION OF THE TRUST DEEDS.

ADDRESS BY THE HON. WAYNE MAC VEAGH, LL.D., REPRESENTING  
MR. DREXEL.

The presentation of the deeds of trust, on behalf of Mr. Drexel, was made by the Hon. Wayne Mae Veagh, LL.D.

Ladies and Gentlemen: The service of music and prayer and praise to which we have been permitted to listen has been accepted, I am sure, by all of us alike as a privilege and an inspiration. It was very fortunate that Bishop Potter was able to return to the city where his youth was passed, where his father's memory is still cherished as one of our most precious possessions, and where he himself is as beloved and honored as in his own diocese, to give to the ceremony of to-day the sanction of the Church. It was equally fortunate that our most eloquent orator should increase the importance of this important occasion and add to the distinction of this distinguished assemblage, not only by his presence but also by expressing, in his own incomparable gift of golden speech, the true nobility of the great gift we are met to consummate and the far-reaching consequences the future holds in store for its beneficiaries.

The duty confided to me, although very important, may happily be discharged very briefly, but that it is not to be discharged by Mr. Drexel in person is profoundly to be regretted. From the inception of this noble enterprise, he doubtless allowed himself to look forward to the day when it would be his pleasure to deliver to the gentlemen appointed to receive them the deeds transferring his generous benefactions to the Institute which was to bear his name, and he well knew that his delight in doing so would be far



more than doubled by having at his side her whose care and sympathy and love had been the solace and reward of all his labors ; but that Providence whose ways are indeed “past finding out,” “but whose wisdom it behooves us not at all to dispute,” has seen fit, just as he was making these great gifts to others, to withdraw his own best gift from him and leave him desolate indeed. It is only because of his unavoidable absence, that I am representing him.

The first conveyance I am asked to deliver is of the beautiful building in which we are assembled, together with its contents and its appointments, and to be completed, so far as they are incomplete, in the same wide spirit of generosity as marks that which has already been done. I undervalue this gift in estimating it to represent an expenditure of \$600,000.

Those of you who have enjoyed the opportunity of examining the building could not fail to be impressed not only by its beauty but also by the wonderful utilization of its beauty, and therein is struck the keynote of the good work the Drexel Institute is expected to accomplish. Even the noble and stately hall through which we have passed is only a fitting vestibule to the different workshops which surround it—to the workshop filled with forges as well as to the workshop filled with books. Throughout the entire structure the idea of completeness prevails—Mr. Drexel’s resolve having plainly been that the cost was a secondary consideration and that whatever was a useful means to the ends he contemplated was to be supplied ; and it has been supplied even in minutest detail and extending to the physical comfort as well as to the mental and manual training of the young men and young women who are to pass through these halls to a wider and more useful, as well as to a wiser and more cultivated, manhood and womanhood.

Having provided such a beautiful home for the students who are to gather here and having filled it with every device calculated to make their labors both agreeable and fruitful, Mr. Drexel next addressed himself to the duty of providing for the support of the Institute while engaged in its many and diversified fields of instruction.

He fully appreciated that the breadth of view and the comprehensiveness of design, illustrated in the eleven departments into which the present work of the Institute has been divided, required the most liberal endowment, and, acting in the same enlightened spirit which actuated him in the erection and appointments of the building, he enables me to transfer to the Institute securities of the most desirable and conservative character, exceeding at their present market value the sum of \$1,000,000, and producing a revenue of \$50,000 a year.\*

I find it extremely difficult to speak in terms of becoming moderation of such generosity. These are, indeed, princely gifts, worthy of the giver and of the noble-hearted wife who encouraged him to make them, and of the high and sacred causes of art and science and industry to which they are dedicated. And these great benefactions possess one characteristic which ought not to pass unnoticed. The money thus freely given is singularly free from liability to even unjust criticism of the manner in which it was acquired. The founder of this Institute never sought or received any special favor, by legislation or otherwise, of any kind. No single dollar of the million and a half dollars Mr. Drexel gives away to-day represents any methods of acquiring wealth except open and straightforward methods.

Judge Allison, in replying recently to the congratulations of the Bar upon having completed forty years of most useful and honorable judicial service, took occasion to warn us that while in that period "crimes of violence had greatly diminished, crimes of a different character had greatly increased in the land, and that breaches of public and private trusts had grown with rapid strides."

It is our happy fortune to feel perfectly sure that no portion of the property to-day transferred represents even a bounty voted or a franchise conferred at the supposed expense of the public, much less any trusts betrayed, public or private. It has never

\* Mr. Drexel, who died June 30th, 1893, bequeathed another million dollars to the endowment of the Institute; the additions made to the equipment of the building before his death amounted to \$400,000; thus making a total of three million dollars given by him for the building, equipment, and endowment.

been suggested that the founder of the Drexel Institute practised any arts but manly arts, or that his great fortune was the result of anything but the advantages his comparatively modest inheritance gave him, and his own industry, integrity, and capacity in making use of them. In the days which are before us the question is sure to be asked, and asked often unfairly but with increasing bitterness, of the possessors of great fortunes, not so much what use they propose to make of them, as how they acquired them; and if it be true, as poets say, and a few people may still believe, that an ounce of gold honestly come by is capable of conferring more true happiness than "the wealth of Ormus and of Ind," which wreckers may glean from the beach to which they have beguiled an argosy, the Institute whose beginning we celebrate to-day ought to prove an unalloyed source of joy to him who confers and to them who receive its advantages, and its troops of graduates ought to be, as pray Heaven they may be, capable of living simple, brave, honest lives, fearing God, and none beside.

In such a benefaction, where the money has been acquired as fairly as it has been given generously, no man may covet any nobler memory of himself than that the generations yet unborn are to rise up and call him blessed for the opportunity this bounty affords them; and one sees, as in prophetic vision, troops of young men and maidens for countless years filling these spacious halls, their eager faces all aflame with generous enthusiasm and their young hearts overflowing with gratitude that they are privileged to drink at the fountains of knowledge flowing here so freely and so abundantly.

For me the chief attraction of the Drexel Institute is the variety of the fountains at which the coming students may choose to slake their thirst for knowledge. It is difficult, of course, to estimate the advantages to be reaped by many youths of both sexes by a faithful pursuit of the practical training to be offered here. To make of young men competent engineers, electricians, and chemists, and excellent and artistic workers in wood and iron; to make of young women skilful designers, stenographers, photographers, bookkeepers, and housekeepers; and especially to









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qualify some of both sexes to be teachers of others in all decorative and useful arts,—is a labor abounding in usefulness and honor; but my confident hope is that there will be results attained here infinitely excelling these in real and abiding value.

If thousands of the young people of Philadelphia are each year brought by day and by night in contact with truth and beauty in such of their myriad forms as will be taught and displayed in the Drexel Institute, this community will grow appreciably, and not slowly, in culture and in the ineffable graces of life which culture brings in her train.

The extensive and wisely selected library and the spacious and attractive reading-room will be almost in themselves to many students a liberal education, while daily contact with representations of the sculpture of Greece and of the Renaissance will arouse the dormant instinct for beauty and give birth to desires for excellence theretofore undreamed of. The museum, already rich in examples of the beautiful creations of many different lands, and sure to increase rapidly its possessions, will be a daily object lesson, kindling in the generous minds of youth the same ennobling aspirations.

To all these quickening influences music is to add her charms, so as to complete with art and letters the magic circle within which the everlasting fountains of idealism are unsealed and the true enjoyment of life begins. It must be a very dull youth indeed, of either sex, who can sit unmoved in such an audience chamber as this while the music of the grand organ falls upon the ear and memory is recalling the lifework of the benefactors of the human race kindred to these whose names we see around us: great musicians who have soothed the weary lives of men with their divine melodies; great painters who have transferred to canvas their fadeless dreams of immortal beauty; great sculptors whose forms “mock the eternal dead in marble immortality;” great patriots who would willingly taste death that their country might live; great philosophers who have spent their lives in the ceaseless and the faithful pursuit of truth; and, over all, great poets, who sit in inaccessible and thronéd majesty, the sovereign educators of mankind.



Under the inspiration and with the benediction of such companionship, the pupils of the Drexel Institute may be confidently expected to prove themselves worthy of the efforts of its founder to help them to help themselves to become wiser and better men and women than if its gracious and generous opportunities had not been proffered to them. It only remains for me to deliver these deeds to Doctor MacAlister, the President of the Drexel Institute, who receives them on behalf of the Trustees.

#### ACCEPTANCE OF THE DEEDS.

ADDRESS BY JAMES MAC ALISTER, LL.D., PRESIDENT OF THE INSTITUTE.

I have the honor, on behalf of the Boards of Trustees and Managers, to accept the deeds of trust of the land, building, and endowment of the Drexel Institute of Art, Science, and Industry. It is not easy to express in adequate terms the responsibility which the acceptance of this trust entails. Were the institution which begins its history to-day one built upon old and established lines, it would be comparatively an easy task to characterize the duties which will devolve upon those who are to be charged with its management. But where the work which it is intended to do and the ends it is expected to accomplish are in so many respects new and untried, a certain degree of reserve is becoming in him who undertakes to state the important obligations which will rest upon every one who is to be concerned in carrying the purposes of the founder into execution.

I am sure, however, that I speak truly in saying that the Board of Managers are as profoundly impressed with the difficulties as they are with the magnitude of the trust which Mr. Drexel has confided to them. The official relations which I hold to the Institute lead me to emphasize this statement while pledging their single-minded devotion to the interests that have been committed to their care.

The scope and purpose of the Drexel Institute are well expressed in the descriptive words of its title. It is to be a School of Art, Science, and Industry. But it is not so much the love of the beautiful, the knowledge of nature, the power to work, con-



sidered as separate elements of human culture, as the close relation and interdependence of these, that will form the subjects of the instruction and training. And it is in this direction that the problems it will have to solve will be found to lie. The specific object of the Institute is to open new and higher occupations, involving knowledge and skill, to young men and women. This it proposes to do by furnishing opportunities for education in the principles and practice that underlie such of the industrial arts as will be included in its curriculum. The productive value and rank of any kind of labor depend upon the amount of mind that is put into it. The craftsman differs from the common laborer in just this respect. It is the divorce between design and execution that has led to the deterioration that has been going on in nearly all the industrial arts for the past three hundred years. In the great days when the common articles of life were made that are now treasured for their beauty in our museums, the artificer and the designer were one; they made with their own hands what their imagination had created. And with this work went a joy which has passed out of the life of the worker. It is to bring back into the school the careful training that was formerly given by the master workman to his apprentices in the shop that the Drexel Institute has come into existence. By joining instruction in science and art to earnest and sincere labor, it will seek to train craftsmen and craftswomen in pursuits that are now relegated to the level of unskilled labor; and in so doing it will strive to make life richer and happier while elevating the laborer and enhancing the value of his handiwork. The Drexel Institute is a product of the new education; of that larger view of the school which is due to Pestalozzi, the humble Swiss schoolmaster, whose name might well have been inscribed with those of the great benefactors of mankind which adorn the walls of this hall. The time has come when the domain of education must be enlarged; when, to the fair humanities which have filled so large and important a place in the schools of the past, must be added the practical necessities of life that the evolution of society has brought into relief. The two questions of the day that are more vital to the existence and well-being of every civilized nation

than all others are the organization of labor and the universal education of the people. And it behooves economists and law-makers to take notice that these two problems are inseparably connected. All the legislation which the wisdom of statesmen or the ardor of reformers may devise will not end the conflict between labor and capital or bring to a close the disturbances that now threaten the very existence of society.

The elevation of labor is no longer a thing to be debated; the point it has already gained is only the vantage ground for the expanse that lies beyond. The need of a deeper, wider sympathy for the laborer on the part of those who stand outside his sphere is conceded on all sides. But the reconciliation will be found only in education. Indeed, education, properly conceived, is the essential condition of all human progress. When those who are charged with the administration of scholastic affairs have risen to Emerson's idea of education, as being as broad as man, and that its great object should be commensurate with life, we shall find provision made for something more than the mere sharpening of the intellectual faculties. The development of the bodily powers, the cultivation of right standards of living, and practical training in those industrial pursuits that come within the range of the school, will all find place in that complete and harmonious unfolding and discipline of the powers and faculties of man's being which has been the ideal of every great educator in the history of the world.

It is not my purpose at this time to go into an exposition of the plans which have been adopted for carrying on the work of the Institute. I shall have the honor at an early day to speak at length on this subject. Meanwhile, the *Preliminary Circular of Information* may be taken as including the ground which the Institute is intended to cover. I may also add that at this stage in the life of the Institute the practical development of its work is quite as important as the discussion of principles. It should be remembered that an institution like this is not made in a day or a year. We shall move slowly at first; we shall have to solve some difficult problems; we shall need to think deeply and work cautiously; but there is a bright and ever-opening future ahead.

Bearing the great purpose of the founder in mind and counting upon the confidence and encouragement of the public, we shall push forward the development of the several departments as rapidly as circumstances may permit; and we have faith that in time the Drexel Institute will realize all that the splendid foundation which it has received gives cause to expect.

It may be permitted me to say that the scheme upon which the Institute has been projected is neither narrow nor illiberal. It has certain specific objects which are a departure from the courses found in existing colleges and schools. But surely there is nothing in these which call for defence. It will seek to elevate, beautify, and ennoble the home by its courses in the domestic arts; it will offer a curriculum in the mechanic arts which will be adapted to bring its graduates in sympathy with the industrial spirit which is not the least important characteristic of modern civilization; it will open up new technical courses that will give to some important occupations a higher position in the economic scale, and secure a larger reward to those who adopt them as a means of livelihood. Surely, these are objects not unworthy of the greatest university in the land! Whatever tends to enlarge and improve the means of self-support for men and women serves to strengthen their self-dependence and self-respect, and these are virtues that lie at the roots of a nation's strength and greatness.

But outside of these special aims the Institute is intended to offer to the masses of the people opportunities of culture and enlightenment in the broadest sense. The Library, Museum, and Lectures will seek to carry to them all that art and literature and science can do to make life nobler and better. The immortal beauty which Athens and Florence have bequeathed to the world will be made to sweeten the daily toil of the bread-winner; and while the Institute may rightly be characterized as secular in its foundation and aims, it will not, I am sure, forget the place which those ethical and religious principles that are universal and eternal should hold in every scheme of education.

I cannot bring these remarks to a close without a reference to the bereavement which has caused the absence of him to whom

all these attractive surroundings and all this fair promise are due. The companion who shared with the founder the fond anticipations which are in part realized to-day is not here to cheer us with her gentle presence. But we have the precious memory of all that she hoped for the Institute. For the Board of Trustees, and, may I be permitted to add, for myself, that memory will be the greatest incentive to make the Institute worthy of the pure and unselfish purpose which gave it birth.

BENEDICTION BY BISHOP WHITAKER.

The ceremonies concluded with the benediction by Bishop Whitaker:—

The peace of God, which passeth all understanding, keep your hearts and minds in the knowledge and love of God and of His Son, Jesus Christ our Lord; and the blessing of God Almighty, the Father, the Son, and the Holy Ghost, be amongst you and remain with you always. Amen.

The audience dispersed with the organ pealing Beethoven's majestic "Hallelujah," from "Mount of Olives."

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THE BUILDING.

This classic and spacious edifice has already become a landmark on West Chestnut Street. Its walls of buff brick and terra-cotta show conspicuously at a considerable distance. The style of the building is the classic Renaissance, or what would be better described as a modern interpretation of Greek forms—perhaps one should rather say motives. This gives assurance of its purity of spirit and explains the impression it makes as a harmonious whole. Even the colors of the marble used are in harmony with the scheme of decoration, which consists chiefly of buffs and reds. The chaste dignity of the Greek











MAIN ENTRANCE.

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motives is met with in almost everything about the building, even to the bronze electric light fixtures which were specially designed for the Institute. Additional beauty is lent to the exterior by the ornamental terra-cotta work which is perhaps the most artistic ever applied to a building in this city. The façade on Chestnut Street is broken in the middle by an attic story which projects above the roof of the structure proper. This is the centre of the ornamentation, for here the wide frieze which extends around the building between the second and third stories meets above the lofty archway. The portal, which is the main entrance, is twenty-six feet wide at the base and rises to a height of thirty-five feet. The decoration of the arch is elaborate and is made doubly interesting by the addition of a series of finely executed high-relief medallion portraits: Bach, representing music; Raphael, painting; Goethe, poetry; Columbus, navigation; Newton, mathematics; Faraday, physics; Humboldt, natural history; Jefferson, government; Galileo, astronomy; Shakespeare, drama; Michael Angelo, sculpture; William of Sens, architecture. In the spandrels of the arch are medallions of Apollo and Moses.

The central object, the keystone, as it were, of the arch, is a well-modeled, graceful figure representing the Genius of Knowledge. Above her, in the frieze, is a tablet bearing the words, "Drexel Institute." Another frieze extends across the attic. On each side of the portal is a wrought-iron lamp projecting from the wall. Each lamp is filled with a cluster of incandescence electric lights.

#### THE GREAT COURT.

The portal admits to a portico supported on each side by red Georgian marble columns and wainscoted with differently colored marbles; the ceiling is paneled with oak. From this portico the visitor passes through the entrance-hall, the ceiling of which is supported by marble columns, to the great court, sixty-five feet square, and fifty-six feet from the floor to the painted glass ceiling. The wide marble stairways, which rise



on each side to the second floor, and the cloister-like galleries, which completely encircle the court on each floor, will, perhaps, be found more impressive than the exterior of the building. The court is floored with tiling in which buffs and dull reds predominate. The ceiling is decorated in the same tints with the adaptation of some of the conventional Greek forms.

The walls of the court above the dado of colored Georgian marble are laid with white enameled brick. The arches on each floor forming the galleries are also faced with the same material. On the south gallery this sameness is broken by the introduction of two pairs of red marble columns in each gallery. The stairways are of white Italian marble, the only foreign marble used in the construction of the building, except in some of the lavatories. The gallery railings and the balustrades of the stairways are of iron grill-work, painted cream-color and heightened with gold-leaf. The design of the railings is very pleasing, and they are said to be specimens of the best ornamental iron-work ever produced in Philadelphia.

#### THE MUSEUM.

To the right of the entrance-hall is the Museum, an apartment about seventy feet square, the walls tinted with a light Indian-red, and the wainseoting and woodwork in black.

#### THE LIBRARY AND READING-ROOM

is an apartment one hundred and ten feet long and sixty feet wide. All the tables and easels are of polished oak. On one of the panels of the room is this apt quotation from Bacon's Essay on Reading: "Read not to contradict and confute, nor to believe and take for granted, nor to find talk and discourse, but to weigh and consider."

#### THE LECTURE-HALL.

To the right of the court, beyond the museum, is the lecture-hall. It is fitted up with appliances for scientific experiments









CENTRAL COURT, MAIN STAIRWAY

LIBRARY  
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and furnished with chairs for three hundred students. The floor is inclined, so that a good view of the platform may be had.

#### PRESIDENT'S AND SECRETARY'S OFFICES.

Near the museum is the office of the President of the Institute. It is handsomely wainscoted in mahogany and furnished in the same wood. The floor is laid with wood carpet. Across the hall, and occupying a corresponding position on the left, is the office of the Secretary and Registrar. It is finished in polished oak, the prevailing style of woodwork in the building.

#### THE AUDITORIUM.

In order to reach the Auditorium from the great court, the visitor descends a marble stairway ; there is also an entrance on Thirty-second Street. This hall is capable of seating fifteen hundred persons. On the stage, which with the screen is richly colored, is the organ, decorated with gold in the style of the Italian Renaissance. Doorways lead from the stage on both sides to the retiring-rooms. Over one is the name of Bach, and above it is a scroll inscribed with a chord from one of his scores ; a similar specimen of Handel's music ornaments the other doorway ; the decoration includes also representations of musical instruments. On the south wall of the room, in the recessed arches, are inscribed the names of the great leaders of thought and culture : Aristotle, Dante, Michael Angelo, Shakespeare, Beethoven, Washington, Gutenberg, Galileo, Franklin, Watt, and Darwin.

#### BASEMENT.

A few steps down another stairway lead the visitor to the basement. Here, under the court, is the electric plant. There are four sixty-horse-power Westinghouse compound engines made especially for the Institute. Each one drives an Edison dynamo of a new type, the whole supplying a current to twenty-



five hundred incandescant lamps. One of the interesting objects in this apartment is the marble switch-board. The plant is also to be used as a means of instructing the students in applied electricity. The boilers are also in the basement, and are connected with the Johnson self-regulating heating-apparatus, an ingenious contrivance which controls the temperature in any room in the building after it is set at the required degree.

#### CLASS-ROOMS, LABORATORIES, AND STUDIOS.

There are in the building, besides the auditorium, lecture-hall, museum, library and reading-room, gymnasium, coat-rooms, and lavatories, forty-three class-rooms, laboratories, and studios. These are situated on the second, third, and fourth floors. The Physical Laboratory is located on the second, and the Chemical Laboratory on the third floor; both are admirably equipped with every appliance necessary for work. The Chemical Laboratory has accommodations for one hundred and sixty students; adjoining it is the private laboratory for the use of the professor of chemistry. On the second and third floors are the coat-rooms and lavatories. The Board of Managers' Room is on the second floor. This is a fine apartment, paneled in mahogany, with a handsomely decorated ceiling.

Considerable space on the third floor is devoted to the art classes. The antique-room is a large room and will be supplied with a fine collection of plaster-casts. Beside it are the other rooms of the art department, occupying space on the north and west sides of the building.

The two rooms for the cookery classes are also on the third floor. In one is a model dining-room, paneled in oak.

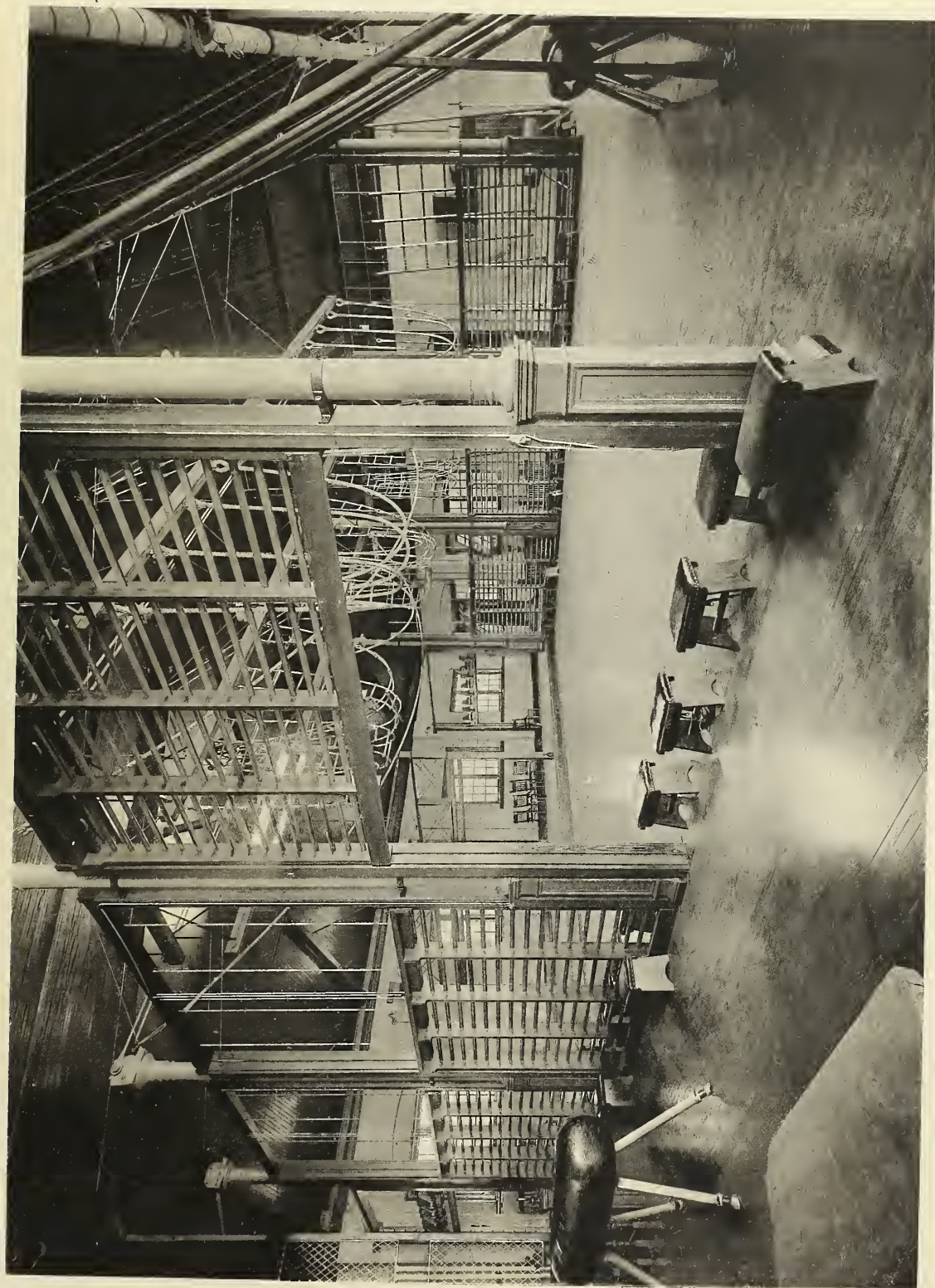
#### THE GYMNASIUM.

The gymnasium occupies the fourth floor in the front part of the building. It is a very large apartment, of a good height, and entered by means of a stairway on each side. One of these is for the use of women only and the other for the use of men.









GYMNASIUM.

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The apparatus was designed by Dr. Hartwell, of Johns Hopkins University.

Connected with the entrances to the gymnasium are the bath-rooms ; they are handsomely fitted up with marble compartments. The plumbing here, as in other parts of the building, is of the best workmanship and in accordance with the requirements of modern sanitary science.

#### LIGHTING, HEATING, AND VENTILATION.

Great attention has been given to the lighting, heating, and ventilation of the building. Every room receives its light from the outside, for the building is bounded on three sides by streets, and on the other side by a wide passageway, in which are fire-proof towers to be used as fire-escapes ; their only connection with the building is by iron bridges. On the rear of the building, on Ludlow Street, are two additional fire-escapes.

















UNIVERSITY OF ILLINOIS-URBANA



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